

ABSTRACT OF THE DISCLOSURE

The invention provides the high-intensity discharge lamp and the high-intensity discharge lamp lighting system and the lighting system using the high-intensity discharge lamp showing the low enough starting voltage. The high-intensity discharge lamp comprising a lighting-source bulb provided with an enclosure, a light-transmissive ceramic enclosure defining a pair of small-diameter cylinders communicating with the enclosure at both ends thereof, a pair of electrodes and discharge agent, a metallic coil which is wound on the outside surface of at least one small-diameter cylinder and coupled to the other end of the electrode to have the same potential with the electrode, a jacket-bulb which hermetically accommodates therein the lighting-source bulb and the metallic coil, and a pair of outer lead terminals which are coupled to the pair of electrodes and hermetically led outside the jacket-bulb. The metallic coil is preferably wound for four turns or more on the small-diameter cylinder, and placed its one end near the boundary to the enclosure of the light-transmissive ceramic discharge enclosure, and the winding pitch of the metallic coil resides in the range of 100 % to 500 %. Further, the length L2 of the metallic coil is 0.3 to 1.0 times the length of the small-diameter cylinder. Furthermore, the end of it which is opposite to the enclosure is coupled to have the same potential as the other electrode.